



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,717	08/28/2001	Pasi Lahti	108347-00009	2909
32294	7590	10/17/2006	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			ABRISHAMKAR, KAVEH	
			ART UNIT	PAPER NUMBER
			2131	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/939,717	LAHTI ET AL.	
	Examiner	Art Unit	
	Kaveh Abrishamkar	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is in response to the amendment filed on July 18, 2006.

Claims 1-7, 9 and 10 are currently pending consideration.

Response to Arguments

2. Applicant's arguments filed July 18, 2006 have been fully considered but they are not persuasive for the following reasons:

Regarding claim 1, the Applicant argues that the Cited Prior Art (CPA), Shetty et al. (U.S. Patent 6,799,197), does not teach upon receipt of a request at the network server, information in the request is used "to identify virus signatures required by said virus signature database." This argument is not found persuasive. The CPA discloses that the client checks in (requests for updates) with a server (column 10 lines 43-53). If there is a new version (update) of the current configuration of the client, then an update is sent to the clients (column 10 lines 43-54). These check-ins are interpreted as requests for updates, because they are treated as such by the server. The clients send a request (check-in) and based on the current configuration, they receive an update (column 10 lines 43-53), which is analogous to identifying which virus signatures are needed, as the new configuration contains virus signatures which are not currently on the client. Furthermore, the Applicant argues that the CPA does not disclose "sending the identified virus signatures via a signaling channel of a mobile telecommunications

Art Unit: 2131

network to the mobile wireless platform.” This argument is not found persuasive. The WAP protocol is used to transfer the update information (column 3 lines 45-55, column 9 line 67 – column 10 line 18, column 10 lines 43-67, column 12 lines 1-6). It is well-known that WAP aims for protocol independence, and is aimed for use with protocols including SMS (see Wikipedia.org: WAP). Furthermore, it is furthermore well-known that SMS is transmitted over network such as SS7 using the GSM MAP framework using either short messages or concatenated SMS messages for longer messages (see Wikipedia: SMS). Therefore, it is asserted that the updates are sent over a signaling channel, as WAP is aimed to be used for SMS and SMS is well-known to be transmitted over signaling channels. Finally, the Applicant argues that there is no motivation to combine the references of Shetty and Lohtia et al. (U.S. Patent 6,560,456). This argument is not found persuasive. Both Shetty and Lohtia are analogous arts in that both use wireless communication to transmit messages and/or updates. Furthermore, Shetty uses emails to send virus updates, and Lohtia uses SMS messages to transmit emails in a mobile environment. In the system of Lohtia, a user can trigger a SMS message to be sent to the mobile phone/device by sending a SMS origination message or other signal, which is analogous to a user in the system of Shetty, checking in, and for the server to see if any updates are available. Therefore, in a mobile system environment, the user can use SMS to request updates of the virus signatures, “without requiring an update or modification to the existing Mobile Switching Center (MSC) software” (Lohtia: column 1 lines 40-42). Therefore, it is asserted that there is proper motivation for combining Shetty and Lohtia.

Art Unit: 2131

Therefore, the rejection is maintained and applied to the newly amended claims as given below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 6-7, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Shetty et al. (U.S. Patent 6,799,197).

Regarding claim 1, Shetty discloses:

A method of updating a virus signature database used by anti-virus software operating on a mobile wireless platform, comprising:

sending a virus update request to a network server to identify to the network server updates required by the mobile wireless platform (column 10 lines 42-67), wherein each client posts its configuration to the server at regular intervals, and when the software is not up-to-date, the virus updates are sent to each client;

upon receipt of the request at the network server, using information in the request to identify virus signatures required by said virus signature database (column 10

lines 42-67), wherein each client posts its configuration to the server at regular intervals, and when the software is not up-to-date, the virus updates are sent to each client;

 sending the identified virus signatures via a signaling channel of a mobile telecommunications network to the mobile wireless platform (column 3 lines 45-55, column 9 line 67 – column 10 line 18, column 10 line 43-67, column 12 lines 1-6), wherein the Wireless Access Protocol (WAP) can be used to update mobile clients (laptops and PDAs) with virus signatures and software.

Claim 2 is rejected as applied above in rejecting claim 1. Furthermore, Shetty discloses:

 A method according to claim 1, further comprising:

 configuring the update data sent to the mobile wireless platform is a virus signature database update (column 10 lines 42-67).

Claim 3 is rejected as applied above in rejecting claim 1. Furthermore, Shetty discloses:

 A method as claimed in claim 1, further comprising:

 configuring the network as GSM or enhanced GSM network (column 3 lines 45-55).

Claim 6 is rejected as applied above in rejecting claim 1. Furthermore, Shetty discloses:

A method as claimed in claim 1, further comprising:
configuring the message carrying the update data to be cryptographically signed
(column 5 lines 4-15), wherein the agent and the servers employ digital signature
technology to ensure that the items were not altered since they were transmitted.

Claim 7 is rejected as applied above in rejecting claim 1. Furthermore, Shetty
discloses:

A method as claimed in claim 1, further comprising:
configuring the mobile platform to comprise a mobile telephone, communicator,
PDS, palmtop, or laptop computer (column 3 lines 50-55).

Claim 9 is rejected as applied above in rejecting claim 1. Furthermore, Shetty
discloses:

A method as claimed in claim 1, further comprising:
identifying by said request the current status of a virus signature database
(column 10 lines 42-67), wherein each client posts its configuration to the server at
regular intervals, and when the software is not up-to-date, the virus updates are sent to
each client.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2131

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shetty et al. (U.S. Patent 6,799,197) in view Lohtia et al. (U.S. Patent 6,560,456).

Claim 4 is rejected as applied above in rejecting claim 1. Shetty does not explicitly disclose that the update messages are carried by one or more Short Message Service (SMS) messages. Lohtia discloses that SMS messages can be used for a user to request an update of its database (column 2 lines 20-22), and the server will locate the necessary update and sends it to the user (column 9 lines 4-22). These updates can occur over SS7 links or any other well-known telecommunications links (column 7 lines 42-57). Shetty can use wireless protocols to transmit the virus updates, and in one embodiment, use e-mails to transmit the virus updates (Shetty: column 2 lines 50-53), and Lohtia states that SMS can be used to send emails (Lohtia: column 1 lines 26-31). Therefore, it would have been obvious that SMS messaging system taught by Lohtia can be used to send the virus updates of Shetty so that wireless subscribers are provided with the "capability to request particular types of messages at any time" (Lohtia: column 1 lines 37-39), "without requiring an update or modification to the existing Mobile Switching Center (MSC) software" (Lohtia: column 1 lines 40-42).

Regarding claim 10, Shetty discloses:

A method of protecting a wireless device against viruses, comprising:
maintaining a database of virus signatures (column 10 lines 42-67);

searching for virus signatures contained in the database (column 10 lines 42-67), wherein each client posts its configuration to the server at regular intervals, and when the software is not up-to-date, the virus updates are sent to each client;

sending virus update requests to a network server to identify to the network server updates required by the mobile wireless platform (column 10 lines 42-67), wherein each client posts its configuration to the server at regular intervals, and when the software is not up-to-date, the virus updates are sent to each client.

Shetty does not explicitly disclose that the update messages are carried by one or more Short Message Service (SMS) messages. Lohtia discloses that SMS messages can be used for a user to request an update of its database (column 2 lines 20-22), and the server will locate the necessary update and sends it to the user (column 9 lines 4-22). These updates can occur over SS7 links or any other well-known telecommunications links (column 7 lines 42-57). Shetty can use wireless protocols to transmit the virus updates, and in one embodiment, use e-mails to transmit the virus updates (Shetty: column 2 lines 50-53), and Lohtia states that SMS can be used to send emails (Lohtia: column 1 lines 26-31). Therefore, it would have been obvious that SMS messaging system taught by Lohtia can be used to send the virus updates of Shetty so that wireless subscribers are provided with the "capability to request particular types of messages at any time" (Lohtia: column 1 lines 37-39), "without requiring an update or modification to the existing Mobile Switching Center (MSC) software" (Lohtia: column 1 lines 40-42).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shetty et al. (U.S. Patent 6,799,197) in view of Clapton et al. (U.S. Patent 6,192,237).

Claim 3 is rejected as applied above in rejecting claim 1. Shetty does not explicitly disclose using Unstructured Supplementary Services Data (USSD) messages to carry the update data. Clapton discloses a system wherein in mobile units (mobile telephones) can send and retrieve data via Unstructured Supplementary Services Data (USSD) messages on a signaling channel on a GSM network (column 5 line 47 - column 6 line 13). Shetty and Clapton are analogous arts because both use wireless protocols to communicate data from servers to mobile clients. Clapton discloses that the USSD capability allows "supplementary service control between a terminal and its home network" (column 2 lines 26-28) and enables "operators to introduce their own special service offerings" (column 2 lines 30-35), "without the need to modify the mobile station" (column 2 lines 33-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the USSD capability present in wireless networks (GSM) to allow the operator to send special service offerings (virus updates) to the mobile station without the need to modify the mobile station (Clapton: column 2 lines 25-40).

6. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shetty et al. (U.S. Patent 6,799,197) in view of Lohtia et al. (U.S. Patent 6,560,456) in further view of Latva-Aho (U.S. Patent Publication US 2002/0168111 A1).

A method for a mobile wireless platform, comprising:

sending a message from a mobile station to an anti-virus server, wherein the message indicates virus signatures stored in the mobile station (column 10 lines 42-67), wherein each client posts its configuration to the server at regular intervals, and when the software is not up-to-date, the virus updates are sent to each client;

in response to the message from the mobile station, generating return messages at the anti-virus server including virus signatures different from the virus signatures stored in the mobile station (column 3 lines 45-55, column 9 line 67 – column 10 line 18, column 10 line 43-67, column 12 lines 1-6), wherein the Wireless Access Protocol (WAP) can be used to update mobile clients (laptops and PDAs) with virus signatures and software;

sending the return messages from the anti-virus server to the mobile station to update the virus signatures in the mobile station (column 3 lines 45-55, column 9 line 67 – column 10 line 18, column 10 line 43-67, column 12 lines 1-6), wherein the Wireless Access Protocol (WAP) can be used to update mobile clients (laptops and PDAs) with virus signatures and software.

Shetty does not explicitly disclose that the update messages are carried by one or more Short Message Service (SMS) messages. Lohtia discloses that SMS messages can be used for a user to request an update of its database (column 2 lines 20-22), and the server will locate the necessary update and sends it to the user (column 9 lines 4-22). These updates can occur over SS7 links or any other well-known telecommunications links (column 7 lines 42-57). Shetty can use wireless protocols to transmit the virus updates, and in one embodiment, use e-mails to transmit the virus

Art Unit: 2131

updates (Shetty: column 2 lines 50-53), and Lohtia states that SMS can be used to send emails (Lohtia: column 1 lines 26-31). Therefore, it would have been obvious that SMS messaging system taught by Lohtia can be used to send the virus updates of Shetty so that wireless subscribers are provided with the "capability to request particular types of messages at any time" (Lohtia: column 1 lines 37-39), "without requiring an update or modification to the existing Mobile Switching Center (MSC) software" (Lohtia: column 1 lines 40-42). The Shetty-Lohtia combination does not teach using "concatenated" return messages to send virus signatures updates. Latva-Aha uses concatenated Short messages (C-SMS) to transmit image data over a mobile communications network (paragraph 53). Latva-Aha is analogous art to the system of Shetty-Lohtia as both systems transmit data using wireless communications means including using SMS over a mobile communications network. It would have been obvious to use concatenated SMS messages to transmit the virus signatures, because as stated in Shetty, the updates are frequently in the form of DAT files (column 8 lines 31-38). Therefore, if there are a plurality of virus signatures that need to be updated, a single SMS message cannot hold the information. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the concatenated SMS messages of Latva-Aha to transmit the updated virus signatures to the mobile station "in order to transmit a larger amount of information" (Latva-Aha: paragraph 52).

Art Unit: 2131

Claim 12 is rejected as applied above in rejecting claim 11. Shetty does not explicitly disclose initiating a virus signatures update by the anti-virus server by sending a short message service (SMS) request to the mobile station notifying of the virus signatures discovered since last update. Lohtia discloses sending an SMS origination message to act as a trigger to cause information (updates) to be sent via SMS to the wireless device (column 2 lines 17-22). Shetty and Lohtia are analogous arts as both use wireless transmission means to update mobile devices with information. It would have been obvious to one of ordinary skill in the art at the time of invention to use an SMS message as a trigger as disclosed by Lohtia so that wireless subscribers are provided with "the capability to request particular types of SMS messages at any time" (Lohtia: column 1 lines 39-42), "without requiring an update or modification to the existing Mobile Switching Center (MSC) software" (Lohtia: column 1 lines 39-42).

Claim 13 is rejected as applied above in rejecting claim 11. Furthermore, Shetty discloses:

 sending a request from the anti-virus server to the mobile station only when the virus signatures stored in the mobile station are not the same as the virus signatures in the anti-virus server (column 10 lines 42-67), wherein each client posts its configuration to the server at regular intervals, and when the software is not up-to-date, the virus updates are sent to each client.

 Shetty does not explicitly disclose that the update messages are carried by one or more Short Message Service (SMS) messages. Lohtia discloses that SMS

Art Unit: 2131

messages can be used for a user to request an update of its database (column 2 lines 20-22), and the server will locate the necessary update and sends it to the user (column 9 lines 4-22). These updates can occur over SS7 links or any other well-known telecommunications links (column 7 lines 42-57). Shetty can use wireless protocols to transmit the virus updates, and in one embodiment, use e-mails to transmit the virus updates (Shetty: column 2 lines 50-53), and Lohtia states that SMS can be used to send emails (Lohtia: column 1 lines 26-31). Therefore, it would have been obvious that SMS messaging system taught by Lohtia can be used to send the virus updates of Shetty so that wireless subscribers are provided with the "capability to request particular types of messages at any time" (Lohtia: column 1 lines 37-39), "without requiring an update or modification to the existing Mobile Switching Center (MSC) software" (Lohtia: column 1 lines 40-42).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2131

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Abrishamkar whose telephone number is 571-272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KA

10/11/2006

Handwritten signature of Kaveh Abrishamkar, dated 10/11/2006.